



ROBERT W RAY
MANAGER
PERMITTING AND ENVIRONMENTAL COMPLIANCE

April 28, 2011

Mr. Sam Werner
Regulatory Project Manager
U.S. Army Corps of Engineers
P.O. Box 489
Newburgh, Indiana 47629

RE: Gibson County Coal, LLC, IDNR Permit No. U-030

Dear Sam,

Thank you for your hospitality and input during the meeting with IDNR, EPA, OSM, IFWS, and USFW on Tuesday. Along with Debbie Collinsworth, I wanted to answer the concerns expressed by you and the representatives of the other agencies. Please review the following response points which reflect the comments expressed in EPA's letter dated April 8, 2011. Call me if you would like to discuss anything or you need further clarification.

Refuse Capacity

There was concern about why the impoundment is sized the way it is and whether there was going to be need for future expansion. Gibson County Coal LLC, IDNR permit U-030, contains 70,000,000 tons of recoverable coal. To mine this coal safely and efficiently, some roof rock and floor rock as well as inherent ash within the coal seam will produce a raw tonnage of 100,000,000 tons or 30,000,000 tons of refuse. This refuse will be separated at the preparation plant in the form of fines and coarse or larger fragments of rock. The plant will separate the refuse and there is normally 2.33 times more weight of coarse compared to the fines. However, the fines have a density of only 60 lbs per cubic ft. while the coarse is approximately 130 lbs per cubic ft. For each ton of refuse there is .3704 CY of fine and .3988 CY of coarse refuse produced. This calculates to approximately 11,000,000 CY of fine refuse and 12,000,000 CY of coarse refuse which is exactly what the proposed refuse area is designed for. This will provide life of mine capacity.



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Location

The location for the refuse area and the mine plant and support facilities was dictated by the property available within the boundary of the proposed underground mine area. The location we chose is the only tract or group of tracts in the region which was larger than 300 acres which was the minimum necessary to facilitate the mine. No other tracts were available for purchase or lease that would have been large enough and outside of a headwater or wetland area. As I stated in the meeting, the headwater area chosen provides enough elevation relief to provide sufficient volume for the refuse without additional expansion of the surface facilities.

Water quality

An accepted Best Management Practice for surface coal mining is the use of sediment control ponds. The two main purposes of a sediment control pond are to prevent sediment from being transported downstream from the project area and to attenuate the storm hydrograph. A secondary purpose is to provide settlement of suspended and settleable particles. In the event chemical treatment is deemed necessary by the regulatory authority, the sediment control pond will serve as the location of that treatment. The ponds do not provide any further water quality improvement.

Inconsistency regarding the stated purpose of permanent sediment ponds

There does appear to be an inconsistency between the application and the February 24th response letter. As stated in the February 24th letter, the ponds are to be retained as permanent structures to support the final land use of fish and wildlife. The application does state that the ponds will provide treatment of effluent from the refuse pile following mining. As the refuse storage is constructed over time, unvegetated material will be exposed which can easily erode. Any mobilized material from these unvegetated surfaces will eventually be transported to the sediment control ponds for retention. Since the life of the structure is +25 years, the ponds will be providing long-term sediment retention. The ponds are designed for sediment retention, and will continue to provide water treatment via sediment retention even after the refuse storage area is completely vegetated. Thus, the statement in the application concerning treatment of the post-mining effluent was made in reference to the water quality improvement from sediment retention only.



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Proposed mitigation

A request was made by the EPA to provide documentation of the search for a mitigation site. During the permitting process, the land division of GCC used all contacts at their disposal to secure mitigation areas. The particular areas targeted were headwater streams and potential wetland restoration areas that were suitable in size and condition for the required mitigation. GCC representatives were met with little interest from farmers and other property owners in the area. Finally a connection was made with Wabash Properties, who owned the proposed mitigation site and showed a willingness to sell. This site was within the desired drainage area and was suitable for restoration.

At the request of the EPA, the website <http://idemmaps.idem.in.gov/apps/MitigationVolunteer/> was reviewed to determine if any volunteer nominated mitigation locations were usable for mitigation. Based on the site's location map, no volunteer nominated mitigation sites were posted or available.

The EPA made a citation from the Final Mitigation Rule regarding acceptable mitigation types. This particular citation (40 CFR § 230.93(e)(3)) is a reference to difficult to replace aquatic resources (e.g. bogs, fens, springs, streams, Atlantic white cedar swamps). The agency proceeds to state that "the mitigation plan needs to include a more robust stream mitigation component...to appropriately offset the proposed impacts."

Outlined within the Final Mitigation Rule are steps that any applicant is to follow to fulfill their compensatory mitigation requirements for any project. In 40 CFR § 230.93(b), the document outlines a hierarchy for compensatory mitigation type and location. This hierarchy is discussed as follows in order with pertinent information to explain the applicant's efforts in reaching the proposed mitigation:

- *Mitigation Bank Credits (b)(2)*: No mitigation bank exists that has a service area that includes the location of the proposed project.
- *In Lieu Fee Program Credits (b)(3)*: The state of Indiana does not currently have an in lieu fee program.



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- *Permittee Responsible Mitigation Under a Watershed Approach (b)(4):* After consulting with the ACE representatives regarding the difficulty that the applicant was having in locating and acquiring appropriate in-kind stream mitigation sites, the watershed approach was viewed as a viable compensatory mitigation option. Several mitigation areas were given a cursory review for applicability and appropriateness before the ACE representatives were brought to the sites for preliminary approval. The proposed mitigation site was settled upon as an appropriate and acceptable option.
- *Permittee Responsible Mitigation Through On-site and In-kind Mitigation (b)(5):* The proposed facility has a projected life of +25 years. The final configuration of the facility will not be conducive to the creation of streams. Due to the extended life of the facility and the inability to create streams on the reclaimed area, on-site mitigation was eliminated as a mitigation option.
- *Permittee Responsible Mitigation Through Off-site and/or Out-of-kind Mitigation (b)(6):* The applicant in conjunction with the watershed approach has proposed an abundance of out-of-kind mitigation and some in-kind mitigation. Without a doubt, this mitigation is preferable to any on-site mitigation option.

When the search for mitigation was initiated no documented watershed plan existed. In 2009, the Gibson County Soil and Water Conservation District (GCSWD) contracted a watershed diagnostic study of the Loefer and Scott Ditches in Gibson County, Indiana. This study constituted a "watershed plan" (40 CFR § 230.92) as defined in the Final Mitigation Rule. The goal of the study was to define needs within the targeted watersheds and provide recommendations for best management practices. The proposed mitigation site fulfills the goals of a watershed approach which is to "support the sustainability or improvement of aquatic resources in a watershed." The study stated that 91% of the soils within the Scott Ditch drainage area are considered to have hydric characteristics. The present-day landscape of the Scott Ditch drainage area includes only 2% of the area as wetlands or open water. This constitutes an 89% loss in wetland area. Discussions were provided in the Section 404 application package can be referenced that provided information on the landscape position, historic conditions, habitat connectivity, and other restoration efforts in the watershed. In conclusion, the applicant has fulfilled the requirements of a watershed approach by complying with the recommendations of the only watershed plan for the affected drainage areas.



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A previous response to prior EPA comments was dated February 24, 2011. In this response was a thorough discussion on how the proposed mitigation met the requirements of a watershed approach by complying with the GCSWD study which represents a watershed plan. The requirements and considerations are outlined in 40 CFR § 230.93(c). The fulfillment of site selection criteria (40 CFR § 230.93(d)) are outlined in the Section 404 permit application package.

The next section within the Final Mitigation Rule relates to Mitigation Type (40 CFR § 230.93(e)). This is the section cited by EPA as supporting the need for more in-kind replacement to compensate for difficult to replace headwater streams. However 40 CFR § 230.93(e)(2) states that "if the district engineer determines...that out-of-kind compensatory mitigation will serve the aquatic resource needs of the watershed, the DE may authorize the use of such out-of-kind compensatory mitigation." The previously cited section (e)(3) states that "if further avoidance and minimization is not practicable, the required compensation should be provided, **if practicable**, through in-kind rehabilitation, enhancement, or preservation..." The practicability of the site selection is a determining criteria for acceptability of the proposed mitigation site. The applicant has demonstrated the depth of their search for in-kind mitigation, which led them to choosing out-of-kind as the preferred and practicable option. GCC's goal is to return a viable, successful, and functioning aquatic resource that will work toward improving the overall ecological integrity and habitat diversity within the Scott Ditch drainage area.

Thanks again for your input and cooperation in this action. I look forward to working with you on the construction and maintenance of the project as well as the mitigation site.

Best regards,

A handwritten signature in dark ink, appearing to read "Robert Ray", is written over a horizontal line.

Robert Ray